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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,530	02/17/2006	Touru Niizaki	00331063PUS1	4991
2292 7590 03/07/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER ABU ALI, SHUANGYI	
			ART UNIT 1755	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			NOTIFICATION DATE	DELIVERY MODE
3 MONTHS			03/07/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/07/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/568,530	NIIZAKI, TOURU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shuangyi Abu-Ali	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/17/2006</u>  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

(1)

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 4 and 5, the phrase "type" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

(2)

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by  
WO 02/17313 A1 to Hulin et al.

This rejection is over the WO 02/17313 A1 because the reference qualifies as prior art under 35 U.S. U. 102 (b). However, for convenience, the paragraph and line numbers of the English language equivalent U. S. Patent Publication No. 2004/0023142 A1 will be cited below.

Regarding claims 1 and 2, Hulin et al. disclose a composition comprising a powdered aluminum ([0045]) carrier coated with carrier preaging agent ([0001]) comprising a charge control agent and a resin ([0060]).

Although they are silent about the charge value relation between the carrier and resin as applicant set forth in claim 1, it is the position of the examiner that since the charge value difference is determined by the charge value of resin and charge value agent themselves, which is a property of the resin and charge value agent, the claimed value difference would be inherent to of Hulin et al. See MPEP 2112.

Regarding claim 3, Hulin et al. disclose either a negative or positive charge control agent used in the composition ([0042] and [0043]).

Regarding claim 4, Hulin et al. disclose polymer functionalized with sulfonic acid used as negative charge control agent in the composition ([0043]).

Regarding claim 5, Hulin et al. disclose polymer functionalized with quaternary ammonium salt used as positive charge control agent in the composition ([0042]).

Regarding claim 8, Hulin et al. disclose that the composition used in electrophotographic printing ([0001]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/17313 A1 to Hulin et al., in view of U.S. Patent No. 5,270,445 to Hou.

Regarding claim 9, Hulin et al. disclose a composition as applicant set forth in claim 1, but they are silent about the method of coating the carrier as applicant set forth in claim 9.

However, Hou discloses a method of coating pigment particles with polymer by dissolving polymer in a good solvent followed by adding a poor solvent to precipitate polymer on the surface of the pigment (col. 6, lines 10-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to use Hou method in Hulin et al pigment making,

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motivated by the fact that the polymer particle size on the pigment surface have controllable size, surface characteristics and morphology (col. 6, lines 7-9).

(4)

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/17313 A1 to Hulin et al., in view of GB 2111522 A to Banba.

Regarding claim 10, Hulin et al. disclose a composition as applicant set forth in claim 1, but they are silent about the method of coating the carrier as applicant set forth in claim 10.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to use the method set forth in claim 10 to coat carrier material, motivated by the fact that Banba, also drawn to the study of polymer coated metallic pigment, discloses a method of coating carrier material by adding monomers in into the solution and then polymerized them to make a composition of good voltage resistance (page 1, line 59-62 and line 13).

(5)

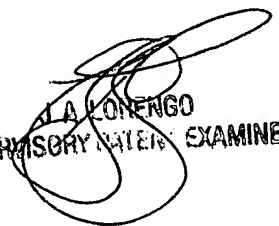
### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Such prior art is listed on PTO-892 B-D. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuangyi Abu-Ali whose telephone number is 571-272-6453. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SA

  
J. A. LORENZO  
SUPERVISORY PATENT EXAMINER